

# COMPETITIVENESS OF UKRAINIAN SEAMANS AT THE MODERN LABOR MARKET

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## Abstract

The article considers the study of the modern maritime labor market, comparison and analysis of education systems, number of seamen by nationality at the trade fleet. As a result of the presented statistical analysis, there can be seen the stable growth of a number of Asian seamen and slow, but stable fall of a percent of seamen from Europe. The analysis of the maritime labor market the last years demonstrates the small growth of a number of European seamen, but the fall in percent ratio to the previous years, connected with the world growth of the trade fleet. The development of the market of maritime labor and the dynamics of changes at it mainly depend on external and internal factors. State standards of training seamen and requirements to their professional competence must be constructed taking into account national and international requirements. An important external factor that influences the development of professional training of qualified seamen is the demand of shipowners for specialists that correspond to requirements of the convention and Code of STCW. Main problems, connected with education and training of future seamen, remained from the times of USSR, and are traced for today also. For solving them, under conditions of fast re-orientation from the internal market to the external one, at absence of the modern Ukrainian fleet, cardinal changes are necessary in the system of education for raising the competitiveness at the labor market, necessity of a state intervention in this question for increasing the material base, control, inflow of young specialists with the modern experience of working in this field.

The modern maritime Ukrainian doctrine includes main directions, according to which elaboration of program documents is realized, namely the development of education in the maritime field. At the same time, it is noted that "the state system of providing safety of navigation may become an effective instrument of solving tasks of the state maritime policy under conditions of functioning such main components of it as: a system of training and retraining of specialists for the maritime field and also organizations and enterprises that realize the activity on providing navigation safety" [1]. As an example, there is considered financing of scientific studies and training of seamen at Szczecin (Poland). The improvement of the modern training system is a necessity and must include a complete synergy of three main directions: theoretical knowledge, practical knowledge and English. The following labor market requirements to modern specialists in a perspective may be the following ones:

- at the theoretical level – scientific thinking, formation of knowledge of management and marketing, ecological and legal knowledge;
- at the practical level – commercial knowledge; ability to work in a collective competence; perfect mastering of informational and communicational technologies; mastering of foreign languages and so on;
- at the personal level – social competence; communication skills; personal initiative; responsibility; professional mobility; individuality; competitiveness; creativity; ability to make correct decisions; fast adaptation to changes [2].

**Keywords:** maritime labor market, competitiveness of seamen, training of seamen, percentage of Ukrainian seamen at the labor market.

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## 1. Introduction

The maritime labor market changes rather dynamically the last years. Standards of training seafarers grow annually, especially taking into account the fact that the main cause of emergency situations remains a human factor. Ukraine occupies the sixth place in the world at the maritime labor market and according to the data of Manpower Report [3] has near 39000 of officers and 30000 of ratings.

The last years the share of Asian seamen essentially grows that must influence our positions at the market. It is already evident for ratings, who has more and more difficulties with finding a job and being competitive. The main problems of it are the quality of professional training and English level. For not losing their positions and even for strengthening them in future, the whole Ukrainian maritime sector must be united and be ready to changes. The Ukrainian state must deeply change its attitude to its role in this question.

Year by year Ukraine becomes an unalienable part of the European society. But we can now see a tendency, when European shipowners prefer their compatriots from EU in key positions at ships, and also have quotes for workers from EU, that Ukraine is not a member of for today, that also complicates Ukrainian seafarers' lives.

It must be remembered that Ukraine has not ratified the Convention MLC 2006 yet, and no one knows, when it does it. Foreign shipowners are mainly interested in selecting seamen from country-members of MLC 2006, but main problems remain – training level of both officers and ratings, and English level. According to the last report of Manpower Report [3], Ukraine occupies the 6<sup>th</sup> place at the maritime labor market (**Fig. 1**), but first places are occupied by Asian countries and taking into account the dynamic development of their market of maritime traffic, it must be expected that their destination at the market will have the dynamics of growth and Ukrainian seamen must propose anything to shipowners for not losing their positions.

No.	country	total officers and ratings	officers	ratings	% of the total number
1	China	243 635	101 600	142 035	14,78
2	Philippines	215 500	72 500	143 000	13,08
3	Indonesia	143 702	51 237	92 465	8,72
4	Russia	97 061	47 972	49 089	5,89
5	India	86 084	69 908	16 176	5,22
6	Ukraine	69 000	39 000	30 000	4,18
7	Turkey	38 985	18 568	20 417	2,36
8	Malasia	35 000	6 313	28 687	2,13
9	Italy	34 486	12 988	21 498	2,09
10	Norway	33 701	14 768	18 933	2,06

**Fig. 1.** Countries-suppliers of seafarers for the labor market

15 of November of 2017 in Odessa there took place the conference of “Ukrainian crewing – the role of quality of training seamen and development of being busy under conditions of competitiveness at the world labor market”. At which a director of UOCC, a captain Viacheslav Kislovsky noted that the exclusion of Ukrainian specialists of young contingent has already become permanent [4]. Shipowners want to employ representatives of other nationalities. And it is not a problem of nationality as such, but a level of training and quality of the staff, in the first turn. He also stressed a necessity to make a close interconnection between maritime educational institutions, centers of training maritime specialists, Ukrainian crewing as a mediator between a seaman and a shipowner.

It is not enough, but, first of all, it must involve the state that, in fist turn, doesn't participate in a Ukrainian seaman life, and sometimes interferes with it. The training system must be reviewed to align it with higher standards, needed by the modern labor market.

It is necessary to note the problem of all post-soviet countries, when after disintegration of the Soviet Union, a state and maritime institutions in short term must re-orient on the new labor market that differed from the soviet one [5]. Fast reorientation has negative results in the training system that can be seen till now.

Training of modern specialists is realized by learning separate academic subjects. A disadvantage of this training is in absence of the close connection between knowledge of separate subjects and their practical use [6]. The quality of training is determined by the actual use of the complicated ship technique by a specialist in the volume, needed for own level, ability to solve different and complicated tasks under dynamic conditions that continuously change, to be able to

obtain and analyze diverse information from different technical means, to use on practice methods of providing safety different by nature. For this aim we must take interconnection at the principally new level, not only between different subjects, but between theoretical and practical parts of training. It relates to both command and ratings.

## 2. Aim

Determination and analysis of dynamics and uncertainty at the maritime labor market that actualizes in a human the need to obtaining the quality professional training at the level of international recognition for employment at ships of both national and international companies, and also main factors that influence the competitiveness of Ukrainian seafarers.

## 3. Research material

Despite the fact that most shipowners begin to use more and more shortened crews, a demand for officers remains high, although their number grows fast (**Fig. 2**), as opposite to ratings that is enough (**Fig. 3**).

	2005	2010	2015	2017
officers	466 000	624 000	774 000	835 400
ratings	721 000	747 000	873 500	904 000
total	1 187 000	1 371 000	1 647 500	1 739 400

**Fig. 2.** Total number of seamen in the world trade fleet, 2005–2017

	officers	ratings	total
supply	835 400	904 000	1 739 400
demand	849 000	774 000	1 623 000
balance	14 000	130 000	116 000
%	1,90%	14,40%	6,60%

**Fig. 3.** Balance of demand and supply of seamen in 2017

According to BIMCO/ICS prognoses, the deficit of officers for the trade fleet till 2025 will reach near 150 thousand persons, and Ukrainian seamen will have a possibility to strengthen their positions at the international labor market. But at the moment we lose this competition.

Our seafarers lose a competitive fight for working places to more trained staff, or to cheaper ones. The fact that Asian seamen will begin to supplant Ukrainian ones from the labor market was almost impossible for us, but we can see this process almost today, even in companies, where Ukrainian have worked for years. At the beginning we were supplanted from the level of ratings, today it is felt even at the officers level market. The dynamics of these changes doesn't provide stability at the labor market for Ukrainian seamen.

Training of officers and ratings in Asian countries (China, Philippines, Indonesia, India) is dynamic and in the nearest future, if a situation doesn't change, we can lose our positions (**Fig. 4, 5**). Attention must be paid also to UNCTAD data for 2015-2017, the trade fleet grew from 90 470 to 93 262 that was almost 1.5% per year.

Annually Ukrainian maritime educational institutions graduate thousands of navigators and engineers, but their professional skills don't always correspond to high standards of the modern labor market. Young staff, having come at a ship after studying or at it, has only surface and out-of-date information about what happens under real conditions of ships. Obtained knowledge are not always supported by practice, in simpler words, they didn't ever touch any modern equipment by their hands, and have no complete understanding of standard safety procedures and court documents that they must cope with everyday.

As it is considered by a managing director of a company "CMA CGM, Ukraine" [7], main problems at employing Ukrainian seafarers are the low English level, banal lack of experience and unprofessional attitude to own work, manifested in repeated cases of excess alcohol taking and decrease of motivation after making a contract. «Young officers are denied in first turn because of the low level of training at educational institutions: because of total corruption, a mean point doesn't reflect real knowledge of a graduate. Finally, the very high priority of money also plays its

role: many officers are ready to change companies permanently for a minimal bonus to a salary. So, a shipowner must completely deny the concrete nationality and to choose more loyal officers”.

	2005 year			
	officers	%	ratings	%
Developing countries	133 000	28%	174 000	19%
Eastern Europe	95 000	20%	115 000	15%
Africa and Latin America	38 000	8%	110 000	15%
Far East	133 000	28%	226 000	37%
Indian subcontinent	68 000	15%	96 000	14%
Totally	467 000	100%	721 000	100%
	2015 year			
	officers	%	ratings	%
Developing countries	176 000	23%	118 000	14%
Eastern Europe	135 000	17%	125 000	14%
Africa and Latin America	65 000	8%	82 000	9%
Far East	300 000	39%	477 500	55%
Indian subcontinent	98 000	13%	71 000	8%
Totally	774 000	100%	873 500	100%
	2017 year			
	officers	%	ratings	%
Developing countries	184 600	22%	106 800	12%
Eastern Europe	143 000	17%	127 000	14%
Africa and Latin America	70 400	8%	76 400	8%
Far East	333 400	40%	527 800	58%
Indian subcontinent	104 000	12%	66 000	7%
Totally	835 400	100%	904 000	100%

Fig. 4. Comparison of number of seamen at the trade fleet for 2005–2017

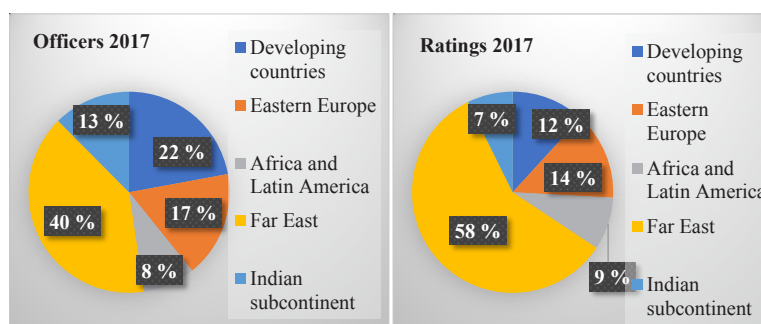


Fig. 5. Share of ratings and officers at the labor market

Considering insufficiency of practical experience at teaching, one must see a problem root. At the present stage we have no material base like in European HEIs, our seamen have no possibility to acquire full-value practical skills on using the modern equipment at educational institutions, including navigation devices and so on. For example, in Szczecin students have a possibility to fully master several types of radars, AIS, practice at several types of ECDIS at training of navigators. Graduates of European educational institutions usually have a sufficient level of knowledge as to main maritime conventions, such as SOLAS and MARPOL.

If compare the training system of students in Poland and Ukraine, in first turn, one may pay attention to the material part. Poland authorities and European Union give rather big resources not only for the training process, but also for scientific researches, that, in its turn, stimulates the development of the whole branch (Fig. 6). For last 18 only this educational institution realized over 50 projects that 1 500 000 and 74 000 000 zloty were received for. During education, already from the first year, students have a possibility to get into a working maritime vessel, to realistic conditions that they will cope with in future with, already from the first year.

At the first year students have a possibility to gain practice knowledge at m/v «Nawigator XXI» with all necessary equipment. At the second learning stage students get into ferries of «PolishBalticFerry». The second most maritime institution of Poland – «Akademia Morskaw Gdyni» also has own ships for maritime practice that don't simply stay at port, but make real maritime voyages. Un-

der these conditions students have a possibility to gain real practical skills of watchkeeping, dock operations, work of ship devices and so on. Even their colleges from Belgium that have no own ships for maritime practice use Polish ships for giving Belgian students and their teachers more practical experience. Unfortunately, our students have not such a possibility.

o.	Project name	Value	Source	Project duration	
1	MORGRAV - Development of technology for acquisition and exploration of gravimetric data of foreshore and seashore of Polish maritime areas	729 875,00 PLN (złoty)	Program Operacyjny Inteligentny Rozwój	02.07.2018	01.07.2021
2	SARA- Maritime Search And Rescue solution using High Accuracy EGNSS	129 050,00 EUR (euro)	Horizon 2020	01.02.2018	31.01.2020
3	EUFAL - Electric urban freight and logistics	201 250,00 EUR (euro)	Era Net	01.01.2018	31.05.2020
4	SOUTH COAST BALTIC- Establishing durable cross-border boating destination management on the basis of the MARRIAGE cooperation network	113 053,00 EUR (euro)	South Baltic	01.10.2016	30.09.2019
5	SBOIL - South Baltic Oil Spill Response through clean-up with Biogenic Oil Binders	350 250,00 EUR (euro)	South Baltic	01.07.2016	30.06.2019
6	Low Carbon Logistics	172 600,00 EUR (euro)	South Baltic	01.06.2016	31.05.2019
7	Go LNG LNG - Value chain for clean shipping, green ports and Blue growth in Baltic Sea Region	320 000,00 EUR (euro)	Baltic Sea Region	01.05.2016	30.04.2019
8	MARELITT Baltic – Reducing the impact of marine litter in the form of derelict fishing gear (DFG) on the Baltic Sea environment.	225 500,00 EUR (euro)	Baltic Sea Region	01.03.2016	28.02.2019
9	EnviSum - Environmental Impact of Low Sulphur Ship Fuel: Measurements and Modeling Strategies	349 375,00 EUR (euro)	Baltic Sea Region	01.01.2016	28.02.2019
Total		729 875,00 PLN (złoty) 1 861 078,00 EUR (euro)			

**Fig. 6.** Current researches of the Szczecin maritime academy

There is a close interconnection between three general aspects of training students: theoretical, practical bases and learning English. They exist as not separate components but a single whole. It has a great importance and gives a necessary result it future.

We need a more flexible system of training seafarers-beginners. We need our HEIs to maximally cooperate with crewing, shipowners and involve the state to this problem. For today at absence of the modern trade fleet in our country seafarers, HEIs and state must exert maximal efforts for interesting foreign shipowners. It is not enough simply to say that our seamen have the high professional level, it must be proved practically and not only once.

According to a newspaper «The maritime Telegraph» at the Eurasian maritime summit in Odessa they were representatives of the Japanese maritime labor union, unions of officers and ratings of Singapore and also representatives of Great Britain and Sweden. As a result of the summit, sides concluded a resolution, according to which, Japanese and other side favor Ukrainian to be employed at Japanese and Singapore ships. «I think that Japanese companies will support

Ukrainian seamen. We also must involve more Japanese companies that want to cooperate with qualified Ukrainian seamen”, – said a representative of the labor union of Japanese seamen Ysume Morita [15].

Requirements to seamen today are not deduced to good mastering of the own profession, but certain mastering of English. Reality is such that many shipowners have completely mixed crews. The level of English that Ukrainian seamen come at ships with, most often doesn't correspond even to minimal requirements and it causes many obstacles and danger, because communication between crew members is almost absent. This problem is urgent for both experienced seafarers and young generation. This problem is especially traced among ratings and engineers.

Ukrainian seafarers are highly appreciated as good specialists that are not afraid of difficult work, but when it deals with communication, there are a lot of problems. Just a human factor, when a person thinks that English is not needed for working in an engine room, cannot be excluded.

For solving this problem there is needed a system approach at all learning levels. For today just the Soviet training system, where English was not considered as a very important factor at training a seaman, so it was taught without necessary interaction, is traced in the teaching system (Fig. 7) It was understandable, because Soviet seafarers worked at soviet ships only, that all communication was in Russian at. The Soviet system, undoubtedly, has own advantages, it was not bad or ineffective. But the problem is that circumstances and requirements to seamen changed that made this system of professional training insufficiently efficient under modern conditions.

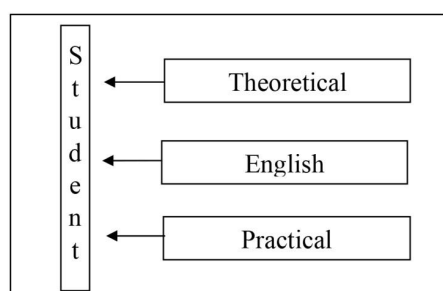


Fig. 7. Absence of interaction between main elements of training a seaman

As it demonstrated by the world practice, it is not effective to study these aspects, separately from each other. It must be distinctly understood, that a seamen specialty in our country is unalienably connected with foreign experience and language at absence of the modern Ukrainian fleet. The active participation of a state and synergy of all main training directions are necessary (Theoretical knowledge, practical knowledge and English) (Fig. 8).

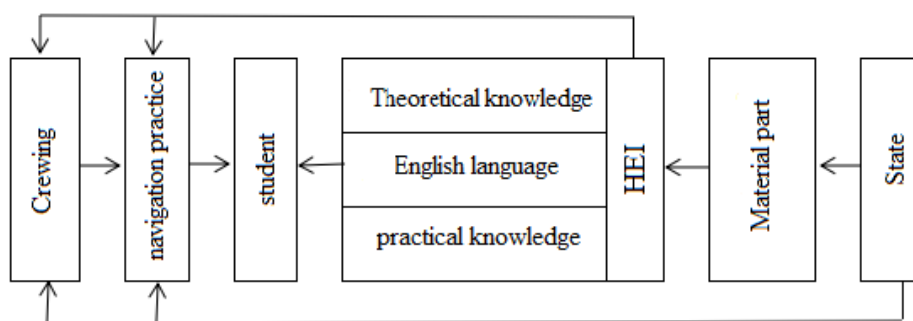


Fig. 8. Possible model of interaction between main training parameters

We must adopt the experience of our nearest neighbors, such as Poland or Romania. The English level of their seafarers is much higher, English is just a profile subject for them, and people begin to learn it at school. Even if we deal with Asian seafarers, even Filipinos, their English level is much higher among ratings than in us, at the same time they are less demanding to the conditions



of contract, and are ready to work for much longer contract than Ukrainian seamen that give them advantages that we observe at the labor market for the last years.

For remaining competitive at the labor market, it is necessary to improve the level of professional training and control continuously, and also to take into account modern tendencies at training the staff. The educational process must include specialists that have information and practical knowledge as to the modern trade fleet.

But there is again the problem of material part, because many working seafarers are not ready to change a work in sea for one in a HEI, because a gap in salary is too much, and the state support is needed.

For example, we can consider Asian countries, where a salary of teachers of maritime HEIs is at absolutely another level, that, in its turn, attract more modern specialists in this field and already gives positive results. According to modern data, there are 70 thousand Indian officers as opposite to 39 thousand Ukrainian ones, and this difference only grows, based on a tendency.

#### 4. Research results

At estimating the competitiveness of a Ukrainian seamen at the labor market, it is necessary to separate problems and perspectives of ratings and officers distinctly. If pay attention to ratings, the first role belongs to bad English, the other main problem is a banal lack of experience, the third place is a weak motivation and alcohol abuse. We must also remember that a rather big share of ratings was professionally trained by the Soviet system yet, and it must be understood, that in the nearest future younger specialists will replace them, and the lack of experience and knowledge will be more urgent. It underlines one more time that the problem must be solved complexly, but not in separate aspects.

As to officers, a situation is a bit different. The first place is there belongs to the lack of knowledge and experience, as opposite to ratings, but the problem with English also remains one of main ones, and occupies the second place. It is especially traced among engineers. The third point may be called “Jumpership”, in simpler words, the problem is that already ordered members of the officer staff are ready to change companies permanently for a minimal bonus to a salary, that, in its turn, disturbs stability at ships. It may result in negative consequences for the whole national segment. As a result, a shipowner may use services of less demanding and more stable staff.

The system of training specialists must be reviewed, interaction between main educational directions must enter a new level.

The role of the state in this problem must be noted. If Ukraine wants to remain a maritime state, it is necessary to participate more actively in training, controlling and employing own seafarers.

#### 5. Conclusions

Thus, for today Ukrainian seamen still rather attractive for foreign companies, but changes are necessary for not losing own positions at the labor market:

1) To change the attitude of seafarers to their work. It is even possible to agree for less attractive labor conditions for not to lose positions at all.

2) Educational institutions and state must elaborate principally new and modern methods of training both officers and ratings, corresponding to modern tendencies or even leave them behind.

3) To make all possible to attract modern specialists in this branch and to give them all necessary resources for working.

4) To stop underestimating the problem of English among Ukrainian seamen. It is necessary to intensify the control of learning English among Ukrainian seamen, and also to inform future specialists about its necessity and topicality at the modern fleet. Possibly it is necessary to elaborate a program of improving English among working seafarers at the state level. It is possible to adopt the experience of European countries, where many urgent problems are discussed and taught also in foreign language that improves further adaptation at real conditions at a ship.

5) To create full synergy in three main directions of training future specialists.

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